**Testing Analyst – Advanced, Quality Assurance and Audit**

**SUMMARY**

The Testing Analyst Advanced is a key technical member of the Quality Assurance and Audit (QAA) team of the Department of Human Services (DHS), Information Technology (IT) section.  Reporting to the Testing Analyst Lead, s/he possesses an advanced understanding of the Testing Analyst duties/functions for software testing and analysis work. S/he performs multiple highly complex activities related to the verification and validation of software quality, and executes other related work duties as required.

S/he performs Testing Analyst functions for both mainframe and server platforms and both waterfall and agile projects and ensures deficiencies are identified and corrected or improved upon quickly. The Testing Analyst - Advanced must effectively manage change and promote continual improvement of IT processes.

**PRINCIPAL DUTIES AND RESPONSIBILITIES**

- Identify issues and opportunities, analyze problems and alternatives, and develop sound conclusions and recommendations.
- Identify process and product improvements and participate in their implementation.
- Develop testing guidelines that address areas such as database impacts, software scenarios, regression testing, negative testing, error or bug retests, or usability.
- Develop or specifies quality assurance standards, measurements, methods, or procedures to determine product quality or release readiness.
- Provide authoritative advice and guidance to colleagues on any aspect of testing, including training for testers and other developers where appropriate.
- Scope test effort to allocate resources, environment, and time to meet the commitments of quality for product solution.  Define testing estimates in terms of complexity of product to provide visibility into the completion of test execution.
- Review design documentation to validate clarity, consistency, and usability.  Review system, business, and report requirements for accuracy and completeness.
- Identify, analyze, and document problems with program function, output, online screen, or content.
- Review business requirements to create test plans, test scripts, and/or test cases.
- Decompose requirements into test cases and test scripts.
- Identify test cases for regression efforts.
- Design and document test plans, scenarios, scripts, or procedures for use during testing and quality assurance activities.
- Communicate effectively any risks associated with the agreed test strategy and the test plan to clients, users and stakeholders for transparency and visibility into the testing process.
- Test system modifications to prepare for implementation.  Execute test scripts or test cases in accordance with the test plan to validate expected results.
- Use test case management tool to enter or update test cases and uses defect management tool to enter or update defects, and report progress.
- Evaluate defects and categorizes according to the defect management plan and process.
- Monitor and report on defect resolution efforts and tracks status or progress.

- Analyze test data and results to detect potential patterns or issues related to software, hardware, and component quality.
- Reviews historical, existing and ongoing test results and defect reports to identify areas needing specific attention. Utilizes testing knowledge and experience to assess or recommend solutions.
- Encourage team ownership of quality to increase overall product solution effectiveness.

**EDUCATION / EXPERIENCE**

A bachelor's degree in Information Technology, Information Systems Management, Computer Science, and/or related technical degrees or coursework from an accredited college or university.

A minimum of two (2) years IT experience in one or a combination of the following: 1) software applications development; 2) systems analysis or design; 3) testing and quality documentation and execution; or 4) business analysis and process design.

An equivalent combination of education and/or experience may be acceptable.

**SKILLS**

This position requires:
- Dedication and commitment to customer service focused delivery of solutions;
- Strong understanding of software testing principles;
- Excellent organizational and planning skills;
- Ability to use and configure testing tools to support efficient testing processes;
- Ability to monitor and control test activities to achieve test project objectives;
- Ability to select and apply appropriate testing techniques to ensure that tests provide an adequate level of confidence;
- Ability to write clear and understandable defect and incident reports;
- Proven experience creating, maintaining, and reviewing testing documentation of all types, including test plans, test results, and defect management data, and providing suggestions for improvement to team members.
- Ability to assess the current status of a test process and proposing step-wise improvements;
- Proven experience in reviewing documentation for adherence to standards; and ability to mentor team in corrective action plan creation and execution; and
- Knowledge of recognition and classification of the typical risks associated with the performance, security, reliability, portability and maintainability of software systems

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